

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

**BOARD AND CODE ADMINISTRATION DIVISION** 

# **NOTICE OF ACCEPTANCE (NOA)**

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/pera/

Reynolds Metals Co dba Alcoa Architectural Products 50 Industrial Blvd. Eastman, GA 31023

#### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### **DESCRIPTION: Reynobond® with Kevlar® Wall Panel**

APPROVAL DOCUMENT: Drawing No. MD-001 "Submittal Dwg.", sheets 1 through 5 of 5, prepared by Alcoa Architectural Products, dated 10/12/2006, with revision "05", signed and sealed by Milton Cubas, P.E., bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 08-0111.04 and consists of this page, evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY
APPROVED

101/30/2012

NOA No 11-1102.01 Expiration Date: December 21, 2016 Approval Date: February 9, 2012

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## **NOTICE OF ACCEPTANCE:** EVIDENCE PAGE

## A. DRAWING "Submitted under NOA # 06-1025.03"

1. Drawing No. MD-001 titled "Submittal Dwg.", sheets 1 through 5 of 5, prepared by Alcoa Architectural Products, dated 10/12/2006, with revision "05", signed and sealed by Milton Cubas, P.E.

## B. TEST "Submitted under NOA # 06-1025.03"

- 1. Test report on Large Missile Impact Test per TAS 201, Cyclic Pressure Test per TAS 203, Uniform Static Air Test, Air Infiltration Test, Water Leakage Test per TAS 202 of "90" x 179" Reynobond® with Kevlar® wall panel system", prepared by Hurricane Test Laboratory, Inc., Test Report No. 0423-0218-06, test units 3, 4, 5, 6, 7 & 13, dated 03/28/2006 through 08/25/2006, signed and sealed by Vinu J. Abraham, P.E.
- 2. Test report on Surface Burning Characteristics of the Reynobond® with Kevlar® wall panel in accordance with ASTM E84-05, prepared by Intertek Testing Services NA, Inc., Test Report No. 3093996SAT-002, dated 04/28/2006, pages 1 through 9 of 9 and signed by Eric G. Hutchinson.
- 3. Test report on Self Ignition Temperature for the polyethylene resin in accordance with ASTM D1929, prepared by Polyhedron Laboratories, Inc., Test Report No. **00317871** dated 07/29/2005, signed by Howard Kaye, Ph.D.
  - 4. Test report on Rate of Burning of Plastics in Horizontal Position for the Reynobond® with Kevlar® wall panel in accordance with ASTM D635-03, prepared by Applied Technical Services, Inc., Test Report No. **D103926** dated 07/12/2006, signed by F. Lopez and E.W. Sproat.
- Test report on tensile strength of Reynobond® with Kevlar® wall panel in accordance to ASTM E8, prepared by Q.C. Metallurgical, Inc., Test Report No. **6HM-680** dated 08/28/2006, signed by Frank Grate, P.E.

#### C. CALCULATIONS "Submitted under NOA # 06-1025.03"

1. Calculations titled "Reynobond w/Kevlar", pages 1 through 15 of 15 and additional sheet 16, prepared by Milton Cubas, P.E., Inc, dated 10/18/2006, signed and sealed by Milton Cubas, P.E.

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

Carlos M. Utrera, P.E.

Product Control Examiner NOA No 11-1102.01

Expiration Date: December 21, 2016 Approval Date: February 9, 2012

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## NOTICE OF ACCEPTANCE: EVIDENCE PAGE

## E. MATERIAL CERTIFICATIONS "Submitted under NOA # 06-1025.03"

- 1. Test report on Peeling Resistance in accordance with ASTM D 1876-01 of 3 mil Bynel® from DuPont<sup>TM</sup> and 3 mil Plexar® from Equistar, prepared by Applied Technical Services, Incorporated, signed and sealed by Milton Cubas, P.E.
- 2 Extruded Tie-Layer Resin "Bynel® from DuPont<sup>TM</sup>" and "Plexar® from Equistar".
- 3. Dow Corning® 795 Silicone Building Sealant.
- 4. Dow Corning® 995 Silicone Structural Adhesive.
- 5. Dow Corning® 983 Silicone Glazing and Curtainwall Adhesive/Sealant.

## F. STATEMENTS.

1. Statement letter of code conformance to 2007 and 2010 FBC and no financial interest, prepared by Milton Cubas, P.E., Inc., dated 12/08/2011, signed and sealed by Milton Cubas, P.E.

1 01/30/2012

Product Control Examiner

NOA No 11-1102.01

Expiration Date: December 21, 2016 Approval Date: February 9, 2012

#### GENERAL NOTES:

These Reynobond® composite panels shall be used for wall construction only. Each actual wall project shall be constructed using the details shown On these drawings as minimum required specifications.

MAXIMUM WIDTH 62° ε MAXIMUM LENGTH 420° (recommended max. 240°)

A - SKIN 0,020" ALUMINUM ALLOY 3105-H25

B1 - TIE LAYER BETWEEN SKIN AND CORE

**B2 - PANELS CONTAIN ONE TIE LAYER** THAT INCLUDES KEVLAR® Brand Fiber

C - CORE POLYMERIC COMPOUND 0.10" THICK

D - FINISH - Reverse Roll Coated Paint

#### REQUIRED TESTS

DESCRIPTION a) Tensile Test ASTM E-8 ASTM D-1929 b) Self lanition

c) Flame Spread 1 d) Smoke Developed 1 ASTM E-84

e) Rate Burning **ASTM D-635** 

#### **BILL OF MATERIALS**

1. PANEL MATERIAL: PE Reynobond® with KEVLAR® (0.157\*) aluminum composite material as manufactured by Alcoa

ASTM F-84

2. ALUMINUM EXTRUSIONS, Aluminum allov 6063 - T6 temper, mill finish as manufactured by Alcoa or others.

a) FRAME (CONTINUOUS)

b) CLIP (CONTINUOUS)

c) STIFFENER (CONTINUOUS)

d) RETAINER (CONTINUOUS)

e) CORNER ANGLE

- 3. METAL STUDS 16ga galvanized or painted steel (per applicable codes to prevent corrosion) with minimum properties of 50 Ksi yield, 65 Ksi ultimate. Minimum 1 5/8" flange, 6" web.
- 4. STUD TO TRACK FASTENERS

ANGLE TO BRIDGING FASTENERS

ANGLE TO STUD FASTENERS

#8-18 x %" Phillips Head Galvanized Steel Pan Tek Screw or similar.

- 5. PANEL TO FRAME FASTENERS. #10 x 1" wafer head, self drilling, self tapping, galvanized steel screw. At 16' O.C. around Perimeter of Panel,
- 6. HORIZONTAL AND VERTICAL JOINT SILICONE (as needed).

a) Dow Coming #995 - 170 PSI - One part,

b) Dow Corning #983 - 170 PSI - Two parts.

c) Dow Corning #795 - 100 PSI - One part.

Horizontal, Vertical and perimeter joint - Weather seal.

d) Dow Corning #795 - 100 PSI - One part Cap Bead - Weather seal

e) Dow Corning #795 - 100 PSI - One part

Panel to frame, frame and corner weather seal.

7. BACKER ROD. (as needed)

a) 5/8" diameter, open cell. b) 1 1/2" diameter, open cell. c) 2" diameter, open cell.

8. CLIP TO STUD FASTENER (as needed)

RETAINER TO STUD FASTENER (as needed) a) # 14 x 1.5" HWH galvanized Tek Steel or equal b) #12 x 2\* HWH galvanized Tek Steel or equal

SCREW CHART AND SCHEDULE (Aluminum clip to metal stud)

Design Pressure	Screw#	Joint Size	Maximum Spacing Metal Studs
± 90 PSF	#14	1/2" to 3/4"	24" O.C.
	(2) #12	1 ½" (Other than perimeter)	24" O.C.
	#14	PERIMETER	24" O.C.
± 120 PSF	#14	1/2" to 3/4"	16" O.C.
	(2) #12	1 ½" (Other than perimeter)	16" O.C.
	#14	PERIMETER	16* O.C.

9. TRACK TO WOOD FRAME FASTENER. 5/16" x 2.5" galvenized steel LAG screw with washer. At 12" O.C. MAX.

10. 2 x 12" YELLOW PINE WOOD.

- 11. METAL TRACK 16ga gaivanized steel or painted (per applicable codes to prevent corrosion) with minimum properties of 50 Ksl yield, 65 Ksl ultimate.
- 12. BRIDGING CHANNEL. 16gs galvanized or painted (per applicable codes to prevent corrosion) steel with minimum properties of 50 Ksl yield, 65 Ksl ultimate. Standard 1/2" flange, 1 1/2" web. WALLS UP TO 10' HEIGHT 1 ROW @ MID-HEIGHT. WALLS EXCEEDING 10' HEIGHT BRIDGING ROW SPACED NOT TO EXCEED 5' 0" O.C.
- 13. UTILITY ANGLE. 16ga galvanized or painted (per applicable codes to prevent corrosion) steel with minimum properties of 50 Ksi yield, 65 Ksi ultimate. Standard 6" wide, 2" leg dimensions. (Bridge Clip or equal).

Enterprise Prince

120 PSF--- 16"O.C. 1-

14. SHIMS Standard glazing shims as needed.

15. Unl-Grip 1/2" neoprene hollow gasket.

PRODUCT RENEWED as complying with the Florida **Building Code** Acceptance No 11-1102.0 Expiration Date [2-121120]

Approved as complying with the Florida Deidlag Code
Date DECEMBER 21, 2006
NOAN 06-1025.03 Minmi Dade Product Cop

SECTION DETAIL LEFT / RIGHT

PANEL ELEVATION 90 PSF --24"O.C. 144.0" (Max. Allowed 420") PANEL #4 PANEL #3 SHT.03/05 60.0" 20.0 PANEL #& PANEL #1 1"to3" or 13" SEE B.O.M. #08 NTS

ALCOA Tel: (478) 374 6871

REYNOBOND® WITH KEVLAR®

Alcoa Architectural Products

50 Industrial Boulevard Eastman, Georgia 31023 USA

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PRODUCTS
Which May Be Used Only For Its Benefit
And Which May Not Be Reproduced Or
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SUBMITTAL DWG. DWG. NO. MD-001

PANEL ELEVATION

MIAMI DADE BUILDING CODE

REYNOBOND® WITH KEVLAR® BILL OF MATERIALS

DATE: 10/12/06

REVISION:

SHEET:

01 OF 05

05







